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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/509,308	05/25/2000	JANETTE SUH	08291-435001	7850

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EXAMINER

MCKANE, ELIZABETH L

ART UNIT	PAPER NUMBER
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1744

DATE MAILED: 02/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/509,308

Applicant(s)

SUH ET AL.

Examiner

Leigh McKane

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 9, 10.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3, 4, and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Rombi (WO 96/09762).

Rombi teaches a method for deactivating dust mite allergens (i.e. excreta) wherein glutaraldehyde is sprayed onto bedding, floors, walls, and other surfaces. The glutaraldehyde is effective in denaturing the major antigens of Der-p and Der-f dust mites.

3. Claims 8, 9, 14, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Bruno (U.S. Patent No. 5,415,815).

Bruno teaches an aerosol composition containing N-methylpyrrolidone, an aerosol propellant, and ethyl alcohol (a solvent). See Abstract. Note that the intended use of a composition does not patentably distinguish it from another composition meeting the claimed limitations.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1-5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blanc (U.S. Patent No. 5,635,132) in view of Rombi.

Blanc teaches that a composition containing thymol (6-isopropyl-m-cresol) in an aliphatic solvent can be used to neutralize the allergenic ejecta of dust mites. See col.2, lines 1-11; col.3, lines 63-67; and Abstract. The composition is sprayed in aerosol form throughout the room to be treated so that it may contact all surfaces within the room (col.3, lines 43-56). Although Blanc does not disclose that the dust mites are Der-f and/or Der-p, Rombi discloses that these are the two primary species of house dust mites (page 1, lines 6-11). Therefore, it would have been

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obvious to one of ordinary skill in the art that the dust mite allergens being denatured by the method of Blanc are those created by Der-f and/or Der-p.

8. Claims 8, 10, and 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rombi in view of Takada et al (U.S. Patent No. 5,965,602).

Rombi teaches a method for deactivating dust mite allergens (i.e. excreta) wherein glutaraldehyde is sprayed onto bedding, floors, walls, and other surfaces. The glutaraldehyde in an amount of 0.05-2% is effective in denaturing the major antigens of Der-p and Der-f dust mites and is provided in the form of a sprayable solution with 95-99% ethanol as a solvent. The composition also contains a miticide. Rombi does not teach use of a propellant for aerosol dispensing.

Takada et al discloses a pesticidal/acarina composition that may be provided in the form of an aerosol spray when a propellant (butane, carbon dioxide) is included (col.3, lines 23-25). As aerosols are generally known to be an effective means of distributing a household chemical, it would have been obvious to include a propellant in the composition of Rombi and to determine the appropriate amount of propellant necessary to achieve dispersion of the active ingredients.

9. Claims 8, 9, 11-13, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blanc in view of Takada et al.

Blanc teaches an aerosol composition containing thymol (6-isopropyl-m-cresol) in a minimum amount of 4% dissolved in 70-76% of an aliphatic solvent. See col.3, lines 63-67. The composition may also contain an antimicrobial agent (col.3, line 64). Although Blanc discloses dispersing the composition in an aerosol form, there is no teaching of using an aerosol can with a propellant for dispensing.

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Takada et al discloses a pesticidal/acarina composition that may be provided in the form of an aerosol spray when a propellant (butane, carbon dioxide) is included (col.3, lines 23-25). As Blanc clearly desires to distribute the composition in aerosol form, it would have been obvious to include a propellant in the composition of Rombi and to determine the appropriate amount of propellant necessary to achieve dispersion of the active ingredients.

10. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blanc and Takada et al as applied to claim 8 above, and further in view of Rombi.

Blanc discloses using an aliphatic solvent of natural origin but does specify a particular one. Rombi teaches a similar composition wherein the dust mite allergen deactivator is dispersed within an aliphatic solvent, such as ethanol. As ethanol is a commonly used solvent that is aliphatic and of natural origin, it would have found obvious use in the composition of Blanc.

### *Conclusion*


11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. JP 6-237979 teaches a composition containing hinoki oil for reducing dust mite allergens. Veith ( EP 0716143) discloses a composition for neutralizing dust mite ejecta (guanine) using a terpene oil in a solvent. Rao et al (WO 99/53763) teaches a composition for the control of dust mite allergens using a plant derived protein denaturant.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leigh McKane whose telephone number is 703-305-3387. The examiner can normally be reached on Monday-Wednesday (7:15 am-4:45 pm).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J. Warden can be reached on 703-308-2920. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

  
**Leigh McKane**  
**Primary Examiner**  
**Art Unit 1744**

elm  
January 27, 2003